

Notice of Allowability

Application No.

10/698,194

Examiner

Tatyana Zalukaeva

Applicant(s)

GANAPATHIAPPAN, SIVAPACKIA

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 09/07/2004.
2. ☒ The allowed claim(s) is/are 17-20.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT/REASONS FOR ALLOWANCE

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ms. Heminger, esq., on November 4, 2004.

The application has been amended as follows:

Please, cancel claims 1-16, 21-23

IN THE SPECIFICATION:

On page 1 after the words "This application is a divisional of prior Application No. 09/956,431 filed September 20, 2001", insert the clause ----now U.S. Patent No. 6,716,949.-----

Allowable Claims

2. Claims 17-20 are allowed over the prior art of record.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance: The closest prior art of record Matyjaszewski et al (U.S. 6,121,371) discloses a method for preparing amphiphilic polymer particles obtained by ATRP process, having polydispersities shown

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in the last column of Table 1 (col.9, 10 and claim 39). As an example, the use of the AMPA/Cu(II)Br₂ initiator system results in emulsions with smaller particle sizes e.g. 100 nm, which anticipates the range as instantly claimed (col. 7, lines 5-10). The process is of polymerizing one or more radically (co)polymerizable monomers in the presence of a system comprising: (a) a suspending medium, (b) a monomer phase suspended in said suspending medium, comprising said monomers, (c) a surfactant, (d) an initiator having one or more radically transferable atoms or groups, (e) a catalyst system comprising: (i) a transition metal compound capable of participating in a redox cycle with the initiator and, (ii) one or more N--, O--, P--, or S-- containing ligands which coordinate in a sigma-bond or in a pi-bond to the transition metal, any C containing compound which can coordinate in a pi-bond to the transition metal, or any carbon containing ligand which coordinates in a carbon-transition metal sigma-bond but which does not form a carbon-carbon bond with said monomer under the polymerization conditions, wherein said catalyst system is at least partially soluble in both said monomer phase and in a polymer phase generated during said polymerizing, to form a (co)polymer emulsion or suspension. The process steps shown in the body and in the examples of the reference do not teach or suggest the the polymerization comprising separately preparing ATRP mix containing hydrophilic monomer and separately preparing an emulsion comprise a hydrophobic monomer, and then polymerizing ATRP mix with emulsion.

According to the instant specification, especially Example 6 on page 13

and description on pages 8 and 9 ATRP mix formation of the instant claim 1

is interpreted as ATRP reaction TAKES PLACE, and then after some of ATRP polymer is formed the emulsion is added.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tatyana Zalukaeva whose telephone number is (571) 272-1115. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tatyana Zalukaeva
Primary Examiner
Art Unit 1713

Tatyana Zalukaeva
11/5/04